



Ground-level Ozone Fact Sheet



What is it?

Ozone is a colorless gas that is made up of three atoms of oxygen. It reacts with other pollutants to form smog (which is usually invisible in South Carolina).

Where can ozone be found?

There are two different locations in the atmosphere where ozone is located. Ozone can be found in the **stratosphere** (up high) where it protects us from damaging ultraviolet (UV) radiation. This is called "good" ozone.

Ground-level Ozone is located below the stratosphere, in the **troposphere** which is the air we breathe. At this location (near by) ozone is a harmful air pollutant. Ground-level ozone is the "bad" ozone. Remember, "good up high, bad near by."

Where do the pollutants come from that form "bad" ozone?

- Motor vehicle exhaust
- Air emissions from industry
- Gasoline vapors
- Chemical solvents
- These chemicals react with strong sunlight and cause harmful ground-level ozone to form in the air we breathe.

What are the health effects of bad ozone?

- Can worsen chronic bronchitis and asthma
- Can cause chest pains, shortness of breath, wheezing, coughing, and nausea.
- Makes it harder for children, sick people, and even healthy people to breathe.
- Repeated exposure to high levels of ozone pollution may cause permanent lung damage

What can you do to help decrease "bad" ozone levels on **Ozone Action Days**?

- Carpool
- Walk
- Bike
- Keep cars well tuned and maintained
- Try not to spill gasoline when filling up your car or gasoline-powered lawn equipment
- In the summer, fill gas tanks in the cooler evening hours, after 6:00 pm, when vapors won't have time to react with sunlight to form ground-level ozone.
- Conserve electricity

What can you do to protect yourself from "bad" ozone?

- During Ozone Season, play outside in the mornings before it gets too hot.
- Don't play outside for too long at a time during the hottest times of the day.



Bureau of Air Quality



South Carolina Department of Health and Environmental Control

